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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,378

09/23/2003

Yusuke Ishihara

Q77002

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EXAMINER

HAUGLAND, SCOTT J

ART UNIT

PAPER NUMBER

3654

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/667,378

Applicant(s)

ISHIHARA, YUSUKE

Examiner

Scott Haugland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/1/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,8 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

Drawings were received on 2/1/07. These drawings are accepted.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the taper wall formed in an annular form recited in claim 3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, line 2, the term "annular" appears to be inaccurate to describe the shape of a taper wall shown in Fig. 9. None of taper walls in Fig. 9 are in the form of a ring.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6, 8, and 11-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,462,905 in view of Ishikawa et al (WO 01/04902).

Claims 1-4 of U.S. Patent No. 6,462,905 include a recording tape cartridge comprising: a reel 2 which is accommodated in a case 3, gear teeth 29, a braking member 4, a braking gear 42 on one surface of the braking member, and a taper wall (guide member) 39. The taper wall is located along a circumference which has a greater diameter than an outer diameter of the braking member and which is substantially coaxial with the reel hub since the taper wall inclines from the inner surface of the reel hub (claim 2) and centers the braking member (claim 1).

Claims 1-4 of U.S. Patent No. 6,462,905 do not claim that the gear teeth 29 are provided along a circumference which is substantially coaxial with a reel hub 21 or that the braking member 4 is formed in a disc-shape.

Ishikawa et al (WO 01/04902) teaches arranging gear teeth 27 along a circumference which is substantially coaxial with a reel hub 21 and teaches forming a braking member 4 in a disc-shape.

It would have been obvious to one having ordinary skill in the art to arrange the gear teeth in the cartridge claimed in claims 1-4 of U.S. Patent No. 6,462,905 along a circumference which is substantially coaxial with the reel hub and to form the braking member in a disc-shape as taught by Ishikawa et al so that the braking gear and hub gear teeth align properly to permit engagement regardless of the angular position of the reel.

The method recited in claims 11-16 is inherent in the manufacture of the cartridge as modified.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8, and 11-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al (U.S. Pat. No. 6,462,905).

Takahashi et al discloses a recording tape cartridge comprising: a reel 2 which is accommodated in a case 3, gear teeth 29 provided along a circumference which is substantially coaxial with a reel hub 21 around which a recording tape is wound at a floor portion of the reel hub, a braking member 4 formed in a disc-shape, a braking gear

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42 on one surface of the braking member, and a taper wall 39 standing erect at the floor portion along a circumference which has a greater diameter than an outer diameter of the braking member and which is substantially coaxial with the reel hub.

With regard to claim 3, the taper walls in Takahashi et al are annular to the extent that walls 96 in Applicant's apparatus are.

The method recited in claims 11-16 is inherent in the manufacture of the disclosed cartridge.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al (WO 01/04902) in view of Laverriere (EP Appl. No. 0284687 - note U.S. equivalent Pat No. 6,896,217).

Ishikawa et al discloses a recording tape cartridge comprising: a reel 2 which is accommodated in a case 3, gear teeth (on projections 27) provided along a circumference which is substantially coaxial with a reel hub 21 at a floor portion of the reel hub, a braking member 4 formed in a disc-shape, a braking gear 42 which can mesh with the gear teeth provided at one surface of the braking member, a plurality of

projections 27 integral with the floor portion of the reel hub, an urging mechanism 5 which is provided between the braking member and a ceiling plate of the case, and a releasing member 6.

Ishikawa et al does not disclose a taper wall standing erect at the floor portion that guides the braking member into a meshing position.

Laverriere teaches providing a tape reel with a taper wall integral with a reel hub on a floor portion of the hub to align and guide a braking member 60 into engagement with gear teeth on the hub. Laverriere, also, teaches providing an annular taper wall (col. 4, lines 37-43).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the cartridge of Ishikawa et al with an taper wall on the floor portion of the hub as taught by Laverriere to guide the braking member into properly aligned engagement with the gear teeth on the hub. The taper wall and projections of the modified cartridge are integral, at least since they are integral with the hub.

With regard to claim 3, it would have been obvious to provide an annular taper wall as taught by Laverriere to guide the braking member.

The method recited in claims 11-16 is inherent in the manufacture of the modified cartridge of Ishikawa et al.



### ***Response to Arguments***

Applicant's arguments filed 2/1/07 have been fully considered but they are not persuasive.

Applicant argues, with regard to the objection to the drawings, that a taper wall 96 is shown in Fig. 10A formed in a circular or ring (annular) manner. However, none of the taper walls shown have the shape of a ring, i.e., resembling the space between concentric circles or cylinders. The taper walls 96 shown in the drawings are described as arc-shaped in the specification. Annular taper walls are described as an alternative embodiment (paragraph spanning pp. 44 and 45 of specification) which is not shown. The term "annular" is used in the specification to contrast the alternative structure with that shown.

Applicant argues that there is no teaching or suggestion in Lammers of a taper wall standing erect at the floor portion along a circumference which has a greater diameter than an outer diameter of the braking member and which is substantially coaxial with the reel hub, wherein the taper wall guides the braking member to the meshing position at which the braking gear meshes with the gear teeth as recited in claims 1 and 14 and that there is no disclosure in Fig. 5 of a taper wall which guides the braking member 32 to a meshing position. However, the taper wall in Fig. 5 of Lammers has the claimed structure and is inherently capable, being a solid surface, of guiding the braking member to the position at which the braking gear meshes with the gear teeth. Laverriere, also, teaches the claimed taper wall structure.

Applicant argues that there is no teaching in Takahashi of a plurality of projections at the floor portion of the reel hub and gear teeth provided at distal ends of the projections wherein a taper wall is provided integrally with the projections. However, in Takahashi, the taper walls 39 and projections 27 on which gear teeth 29 are located are integral. These elements are disclosed as being integral with each other, the reel hub, and reel.

### ***Conclusion***

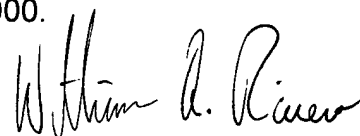
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shima et al (U.S. Pat. No. 6,411,466) is cited to further show a tape cartridge having a braking member engageable with teeth on a hub floor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Mon. - Fri., 10:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



sjh  
3/26/07

**WILLIAM A. RIVERA**  
**PRIMARY EXAMINER**